UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,648	06/29/2001	Naoto Miyauchi	2565-0231P	5809

2292	7590	01/06/2005	EXAMINER

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER
BRUCKART, BENJAMIN R

ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 01/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/893,648	MIYAUCHI, NAOTO
	Examiner	Art Unit	
	Benjamin R Bruckart	2155	

-- Th MAILING DATE of this communication appears on th cov r sheet with the correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>29 June 2001</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is

closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-20</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☒ All   b)☐ Some * c)☐ None of:

   1.☒ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage

    application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
  Paper No(s)/Mail Date <u>20010629</u>.

4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

Detailed Action

Claims 1-20 are pending in this Office Action.

Information Disclosure Statement

The information disclosure statement filed on 6/29/01 has been considered.

Foreign Priority

Receipt is acknowledged of papers submitted on 6/29/01 under 35 U.S.C. 119(a)-

(d), which papers have been placed of record in the file. Attention is directed to the fact

that the date for which foreign priority is claimed is not the date of the filed application

acknowledged in the oath or declaration. The priority date of 12/22/00 is given priority.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 8-10, 13, 15-16, 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Publication No. 2002/016967 by Mann et al.

Regarding claim 1, a network management system (Mann: page 1, para 9) comprising:

a plurality of communications apparatuses for performing communications

through a network (Mann: page 2, para 21; page 3, para 25; requests to and from clients);

an equipment management apparatus (Mann: page 2, para 21; NOC), connected to at least one of the plurality of communications apparatuses through the network (Mann: page 2, para 21), for monitoring and controlling the at least one of the plurality of communications apparatuses (Mann: page 2, para 21; monitors and manages); and

a directory apparatus for managing connection relations between the plurality of communications apparatuses and the equipment management apparatus (Mann: page 3, para 25; information broker),

wherein the equipment management apparatus includes a directory client for transmitting an obtaining request for obtaining a connection relation and receiving the connection relation corresponding to the obtaining request (Mann: page 2, para 21; NCC is an application running on the host and is in communication with the database), and

the directory apparatus includes a directory information base for storing the connection relations and a directory server for receiving the obtaining request from the directory client (Mann: page 3, para 22; database), searching the directory information base in order to detect the connection relation corresponding to the obtaining request (Mann: page 3, para 22, 25; quering), and transmitting the connection relation having been detected to the directory client (Mann: page 3, para 22, 25; to and from clients).

Regarding claim 2, the network management system of claim 1 further comprising:

a network management apparatus for managing the plurality of communications apparatuses and the equipment management apparatus and transmitting the obtaining request (Mann: col. 2, para 21; NOC),

wherein the directory client receives the obtaining request from the network management apparatus (Mann: page 2, para 21; from administrator), transmits the obtaining request to the directory server (Mann: page 3, para 21), receives the connection relation corresponding to the obtaining request from the directory server (Mann: page 2-3, para 21-22), and transmits the connection relation having been received to the network management apparatus (Mann: page 2, para 21; NCC).

Regarding claim 10, the network management system of claim 2,

wherein the directory apparatus further includes an identification information base for storing identification information for identifying the network management apparatus (Mann: page 3, para 25; page 4, para 37; database stores information about subscriptions; heartbeat messages containt GUIDs which are subscribed through the database),

the directory server detects the identification information corresponding to the network management apparatus from the identification information base (Mann: page 3, para 25; para 37), and

the directory client receives the obtaining request from the network management apparatus (Mann: page 2, para 21), transmits a request for obtaining the identification information corresponding to the network management apparatus to the directory server (Mann: page 3, para 21-22), receives the identification information from the directory server, and identifies the network management apparatus based on the identification information having been received (Mann: page 4, para 37; subscribed to).

Regarding claim 4, the network management system of claim 1, wherein the directory apparatus includes an input unit for receiving an input relating to the connection relation (Mann: page 3, para 25; information broker capable of storing subscription information), and the directory server inputs the connection relation received through the input unit and stores the connection relation in the directory information base (Mann: page 3, para 25).

Regarding claim 8, the network management system of claim 4,

wherein the equipment management apparatus further includes a communications path control unit for inputting the connection relation received by the directory client and transmitting a request for establishing communications based on an input connection relation, to at least one of the plurality of communications apparatuses (Mann: page 2, para 21; input from admin to NCC; EMA is the NOC), and

each of the plurality of communications apparatuses further includes a communications agent for receiving the request for establishing communications from the communications path control unit (Mann: page 2, para 21; NCC), and establishing the

communications with the equipment management apparatus based on a received request (Mann: page 3, para 21, 22, 25).

Regarding claim 9, the network management system of claim 4,

wherein the directory information base further stores identification information (Mann: page 3, para 25; GUID), to be corresponding to each of the plurality of communications apparatuses, for identifying the each of the plurality of communications apparatuses (Mann: page 4, para 37; page 3, para 26),

the directory server detects identification information corresponding to at least one of the plurality of communications apparatuses optionally selected, in the directory information base (Mann: page 3, para 22, 25; page 4, para 37), and

the equipment management apparatus further includes an identification control unit for transmitting a request for obtaining the identification information corresponding to the at least one of the plurality of communications apparatuses optionally selected to the directory server (Mann: page 2, para 21; NCC), receiving the identification information from the directory server, and identifying the at least one of the plurality of communications apparatuses optionally selected based on a received identification information (Mann: page 3, para 25; page 4, para 37).

Regarding claim 5, the network management system of claim 1,

wherein the equipment management apparatus further comprises a relation register unit for inquiring a connection relation between the equipment management apparatus and the plurality of communications apparatuses (Mann: page 2, para 21), and transmitting an inquired connection relation to the directory server (Mann: page 3, para 21), and

the directory server receives the inquired connection relation from the relation register unit and stores a received connection relation in the directory information base (Mann: page 3, para 25, 22).

Regarding claim 3, the network management system of claim 1,

wherein the equipment management apparatus includes a plurality of equipment management apparatuses (Mann: page 2, para 21; NOCs; subscribing entities page 4, para 37),

the directory information base stores connection relations between the plurality of equipment management apparatuses and the plurality of communications apparatuses (Mann: page 3, para 22, 25 between components and services being managed), and

the directory client included in one of the plurality of equipment management apparatuses transmits the obtaining request, to the directory server (Mann: page 2, para 21; NCC), for obtaining a connection relation between another of the plurality of equipment management apparatuses and at least one of the plurality of communications apparatuses connected to the another of the plurality of equipment management apparatuses, and receives the connection relation corresponding to the obtaining request from the directory server (Mann: page 3, para 21, 22, 25).

Regarding claim 13, the network management system of claim 3, wherein the directory apparatus includes an input unit for receiving an input relating to the connection relation (Mann: page 3, para 25; page 4, para 37; receives and stores information), and the directory server inputs the connection relation received through the input unit and stores the connection relation in the directory information base (Mann: page 3, para 25; page 4, para 37; receives and stores information).

Regarding claim 15, the network management system of claim 13,

wherein each of the plurality of equipment management apparatuses further includes a communications path control unit (Mann: page 2, para 21; NCC) for inputting the connection relation received by the directory client and transmitting a request for establishing communications based on an input connection relation, to at least one of the plurality of communications apparatuses (Mann: page 2, para 21; input from admin to NCC; EMA is the NOC), and

each of the plurality of communications apparatuses further includes a communications agent for receiving the request for establishing communications from the

communications path control unit (Mann: page 2, para 21; NCC), and establishing the communications with one of the plurality of equipment management apparatuses based on a received request (Mann: page 3, para 21, 22, 25).

Regarding claim 16, the network management system of claim 3,

       wherein each of the plurality of equipment management apparatuses further comprises a relation register unit (Mann: page 2, para 21; NCC) for inquiring a connection relation between the plurality of equipment management apparatuses and the plurality of communications apparatuses (Mann: page 2, para 21), and transmitting an inquired connection relation to the directory server (Mann: page 3, para 21), and

       the directory server receives the inquired connection relation from the relation register unit and stores a received connection relation in the directory information base (Mann: page 3, para 25, 22).

Regarding claim 18, a directory apparatus comprising:

       a directory information base for storing connection relations defining communications paths between a plurality of communications apparatuses and a plurality of equipment management apparatuses which monitor and control the plurality of communications apparatuses (Mann: page 3, para 22, 25); and

       a directory server for receiving an obtaining request for obtaining a connection relation (Mann: page 3, para 25; receives information and queries), searching the directory information base in order to detect the connection relation corresponding to a received obtaining request, and transmitting a detected connection relation (Mann: page 22, 25).

Regarding claim 19, the directory apparatus of claim 18 further comprising an input unit for inputting the connection relation (Mann: page 3, para 25; page 4, para 37; receives and stores information), wherein the directory server inputs the connection relation

received through the input unit and stores the connection relation in the directory

information base (Mann: page 3, para 22, 25; receives and stores information).

Regarding claim 20, a network management method of a network system composed of a

plurality of communications apparatuses (Mann: page 2, para 21; page 3, para 26), and a

plurality of equipment management apparatuses (Mann: page 2, para 21; page 4, para 37),

connected to the plurality of communications apparatuses through a network (Mann: page

2, para 21; Fig. 1), for monitoring and controlling the plurality of communications

apparatuses (Mann: page 2, para 21), the network management method comprising:

storing connection relations for defining communications paths connecting the

plurality of communications apparatuses and the plurality of equipment management

apparatuses in a directory information base (Mann: page 3, para 22, 25);

receiving an obtaining request for obtaining a connection relation (Mann: page 2,

para 21; page 3, para 22, 25);

detecting the connection relation corresponding to a received obtaining request by

way of searching the directory information base (Mann: page 3, para 21, 22, 25); and

transmitting a detected connection relation (Mann: page 3, para 21-22, 25).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

Claims 6-7, 11-12, 14, 17 are rejected under 35 U.S.C. 103(a) as being anticipated by U.S. Publication No. 2002/016967 by Mann et al in view of U.S. Patent No. 6,279,001 by DeBettencourt et al.

Regarding claim 11,

The Mann reference teaches the network management system of claim 3, wherein each of the plurality of equipment management apparatuses includes monitors each of the plurality of equipment management apparatuses (DeBettencourt: col. 6, lines 51-59),

The Mann reference does not explicitly state monitoring load state.

The DeBettencourt reference teaches a load monitor unit for monitoring a load state of the each of the plurality of equipment management apparatuses (DeBettencourt: col. 6, lines 51-59), and

a load control unit for collecting load states from the load monitor unit included in the each of the plurality of equipment management apparatuses (DeBettencourt: col. 6, lines 51-59) and managing the plurality of communications apparatuses connected to the plurality of equipment management apparatuses, based on the load states having been collected (DeBettencourt: col. 6, lines 51-59).

The DeBettencourt reference further teaches the system the load monitors can give current information about the system operation, predict and adapt to impending crises (DeBettencourt: col. 3, lines 50-62).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the network management system as taught by Mann while employing a load monitor as taught by DeBettencourt in order to allow the load monitors can give current information about the system operation, predict and adapt to impending crises (DeBettencourt: col. 3, lines 50-62).

Claims 6-7, 12, 14, 17 are rejected under the same rationale given above. In the rejections set fourth, the examiner will address the additional limitations and point to the relevant teachings of DeBettncourt et al and Mann et al.

Regarding claim 12, the network management system of claim 11,

wherein each of the plurality of equipment management apparatuses further includes a warning generation unit for generating a warning when the load state

monitored by the load monitor unit is over a predefined threshold (DeBettencourt: col. 3, lines 51-53).

Regarding claim 17, the network management system of claim 1,

wherein the equipment management apparatus includes a load monitor unit for monitoring a load state of the equipment management apparatus (DeBettencourt: col. 6, lines 51-59), and

the directory apparatus further includes a load control unit for obtaining the load state from the load monitor unit included in the equipment management apparatus (DeBettencourt: col. 6, lines 51-59) and managing the plurality of communications apparatuses connected to the equipment management apparatus, based on an obtained load state (DeBettencourt: col. 6, lines 51-59).

Regarding claim 6, the network management system of claim 4, wherein the directory apparatus further includes

a communications apparatus information table (Mann: page 3, para 22, 25; database or information broker) for storing a maximum number of the plurality of communications apparatuses which can be connected with the equipment management apparatus (DeBettencourt: col. 7, lines 61-65; col. 8, lines 38-42; number of concurrent threads handling requests; limit load per request; Fig. 12A) and

a number of the plurality of communications apparatuses which are currently connected with the equipment management apparatus (DeBettencourt: col. 8, lines 3-5), and

a number control unit for defining the plurality of communications apparatuses to be connected with the equipment management apparatus (DeBettencourt: col. 7, lines 61-65; col. 8, lines 38-42; number of concurrent threads), based on the maximum number of the plurality of communications apparatuses which can be connected with the equipment management apparatus and the number of the plurality of communications apparatuses which are currently connected with the equipment management apparatus stored in the communications apparatus information table (DeBettencourt: col. 8, lines 27-43).

Regarding claim 7, the network management system of claim 6,

wherein the directory information base further stores locations of the plurality of communications apparatuses (Mann: page 4, para 37; subscriber entities; page 3, para 25), and

the directory apparatus further includes an area control unit for defining the plurality of communications apparatuses to be connected with the equipment management apparatus (DeBettencourt: col. 7, lines 61-65; col. 8, lines 38-42; number of concurrent threads), based on the maximum number of the plurality of communications apparatuses which can be connected with the equipment management apparatus and the number of the plurality of communications apparatuses which are currently connected with the equipment management apparatus stored in the communications apparatus information table (DeBettencourt: col. 8, lines 3-5), and the locations stored in the directory information base (DeBettencourt: col. 6, lines 15-23).

Regarding claim 14, the network management system of claim 13, wherein the directory apparatus further includes

a communications apparatus information table (Mann: page 3, para 22, 25; database or information broker) for storing a maximum number of the plurality of communications apparatuses which can be connected with one of the plurality of equipment management apparatuses and a number of the plurality of communications apparatuses which are currently connected with the one of the plurality of equipment management apparatuses (DeBettencourt: col. 7, lines 61-65; col. 8, lines 38-42; number of concurrent threads handling requests; limit load per request; Fig. 12A), and

a number control unit for defining the plurality of communications apparatuses to be connected with the one of the plurality of equipment management apparatuses (DeBettencourt: col. 7, lines 61-65; col. 8, lines 38-42; number of concurrent threads handling requests; limit load per request; Fig. 12A), based on the maximum number of the plurality of communications apparatuses which can be connected with the one of the plurality of equipment management apparatuses and the number of the plurality of

communications apparatuses which are currently connected with the one of the plurality

of equipment management apparatuses (DeBettencourt: col. 8, lines 3-5) stored in the

communications apparatus information table (DeBettencourt: col. 8, lines 27-43).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Benjamin R Bruckart whose telephone number 571-272-

3982. The examiner can normally be reached on 8:00-5:30 PM with every other Friday

off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone numbers for

the organization where this application or proceeding is assigned are (703) 872-9306 for

regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 571-272-

3982.

Benjamin R Bruckart
Examiner
Art Unit 2155
brb
December 06, 2004

HOSAIN ALAM
SUPERVISORY PATENT EXAMINER